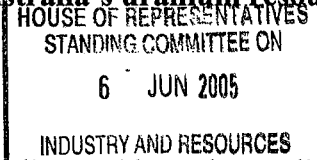


Energy Resources of Australia Ltd.

Submission to House of Representatives Standing Committee on Industry and Resources

Inquiry into the development of the non-fossil fuel energy industry in Australia

Case study of the strategic importance of Australia's uranium resources.



Overview of ERA

Energy Resources of Australia Ltd. (ERA), an Australian Stock Exchange-listed company (68.4 percent owned by Rio Tinto), is among the world's three largest uranium producing companies, with Cameco (Canada) and Cogema (France).

Since 1980 the company has mined ore and produced uranium oxide at its Ranger mine, 250 kilometres east of Darwin in the Northern Territory. The company's Jabiluka lease, north of Ranger, is currently on long term care and maintenance.

The Ranger and Jabiluka leases are located on Aboriginal land, granted under the Aboriginal Land Rights (NT) Act. The conditions for mining on Aboriginal land are laid down in agreements with the Northern Land Council representing the Mirarr Traditional Owners, and a new mining agreement over Ranger is currently under negotiation.

The company sells uranium oxide to power utilities in Japan, South Korea, Europe and North America under strict international safeguards administered through the Australian Safeguards and Non-Proliferation Office (ASNO).

In calendar year 2004 the Ranger mine produced 5,137 tonnes of uranium oxide, a production record for the company (2003: 5,065 tonnes).

Mining at Ranger is expected to continue until at least 2008, with milling operations continuing until at least 2011.

ERA also holds title to the world-class Jabiluka deposit, situated 22 kilometres north of Ranger. ERA purchased this lease in 1991, after some important approvals for the development had been gained. However, over the past decade, development of the deposit has been opposed by Traditional Owners and others, and a decline sunk in 1998 was backfilled in 2003 in response to these concerns.

The proposed Jabiluka mine site is now under long-term care and maintenance after an agreement signed in early 2005 with the Aboriginal Traditional Owners and the Northern Land Council. The agreement gives the Traditional Owners the right of consent over any further development of the deposit, and waives certain payments for disturbance of the land.

During 2004 ERA paid \$8.1 million in royalties from the Ranger operation to the Commonwealth Government. This money is ultimately distributed to Northern Territory-based Aboriginal groups, including the Traditional Owners. Additionally ERA paid \$2.4 million in royalties to the Commonwealth Government for distribution to the Northern Territory government during 2004. Ranger has paid a total of \$207.7 million in nominal terms in royalties since the project began in 1980. In net present

value terms (i.e. taking into account inflation, plus a ten percent discount rate) this is equivalent to more than \$1 billion.

In nominal terms, ERA has paid \$202.8 million in income tax in the last ten years alone. ERA has also paid \$9.86 million in payroll taxes over the past ten years, in nominal terms.

ERA is a significant employer in the Northern Territory with an annual payroll, including contracts for services, of \$45 million. ERA is the dominant contributor to the Alligator Rivers regional economy, employing more than 300 permanent full time and fixed term contract staff. Many more contractors, sub-contractors and local businesses are also dependant on the company's business..

As at April 2005 ERA employed 37 Indigenous staff, (including four Aboriginal Trainees). There were a further four Aboriginal people employed under a Community Development Employment Program (CDEP). The company had an Aboriginal participation rate of 11.5 percent of its permanent full time and fixed term contract workforce.

The company has provided much of the infrastructure for the town of Jabiru, the main service centre for the Kakadu National Park. The company is working with Aboriginal groups in the region to identify further employment and entrepreneurial opportunities. The company is also working in partnership with other stakeholders through the Jabiru Region Sustainability Project to build a sustainable future for people in the area.

Comments relating to Terms of Reference (a) and (b): Global Demand for Australia's uranium resources; Strategic importance of Australia's uranium resources.

Energy demand is closely tied to economic growth. There has been a steady increase in demand for energy in recent years, and the International Energy Agency projects that this demand for primary energy is expected to grow 60% by 2030; with significant challenges arising from the projected increase in greenhouse gas emissions and the required investment in energy infrastructure.

During 2004 the market price of uranium oxide increased substantially, continuing a fundamental change in market dynamics that began late in the previous year.

Following a 40 per cent increase in spot prices during 2003, the uranium oxide price rose a further 40 per cent in 2004. Market prices for long-term contracts increased at a faster rate and by December 2004 the long-term indicators published by independent analysts had risen to US\$25 per pound. In the first half of 2005 prices have risen even higher, with long-term prices reaching the US\$30 per pound mark and spot prices reaching their highest level since 1980.

In ERA's view, following many years of declining inventories and the 2003 supply disruptions in the uranium industry, market behaviour has fundamentally changed, with security and stability of fuel supply becoming the most important issues for nuclear utilities.

The main reasons for this are:

- In many countries, nuclear utilities are increasing plant output and operating efficiency, which in turn increases uranium demand.
- New nuclear power plant construction is increasing around the world, particularly because nuclear power is increasingly seen as an important option in responding to the issue of greenhouse gas emissions.

China currently has nine nuclear reactors operating, and is constructing several more to help ease its long-term energy shortfall, announcing it will build up to 40. South Korea, India, and Japan continue to plan and construct new units, and Finland is constructing its fifth nuclear unit, the first new order in Europe in twenty years. While no new orders have yet been placed in North America, significant pre-order work is being undertaken by US utilities, including applications for early site permits and the streamlining of regulatory processes. Some countries such as Chile, which have previously been strenuously opposed to nuclear power, are now considering nuclear power.

As a result of these favourable demand-side trends, and with supplier and consumer inventories substantially depleted, demand for uranium oxide is expected to remain strong in 2005. Security of supply is a very important consideration for buyers, and as a result they prefer to cover future needs with long-term contracts from reliable suppliers. The spot market has dwindled as a proportion of overall trade. Despite higher market prices, industry analysts continue to point to a supply shortage that will encourage new mine investment and development.

Over the last 15 years the overhang of secondary supplies from various sources has tended to keep uranium prices low. Following the collapse of the Soviet Union, utilities, governments, and the military sold excess uranium inventories. The US and Russia continue to cooperate on a program to bring highly enriched Russian warhead uranium down to commercial levels for use in reactors.

While this program is scheduled to last until 2013, it appears unlikely to be extended. The Russian government has taken steps to reserve more of this uranium for its own non-military use, contributing to the tightness of supply.

Primary mine supply is beginning to recover in response to improved prices, as some of the larger producers increase their output marginally. However the ability to increase both primary and secondary production of uranium is limited, and the lead times for new developments are lengthy.

Although discovered more than twenty years ago, the Cigar Lake deposit in Canada, the world's richest uranium deposit, is only now about to enter the mine construction phase.

In Australia there are a number of known uranium deposits that cannot clear the hurdles of State Government opposition to uranium mining, or land access issues.

In ERA's case, the company's Jabiluka lease, containing one of the largest undeveloped uranium deposits in the world, remains a valuable asset. As mentioned, an agreement with Aboriginal Traditional Owners over its future has been signed and development of the deposit would only go ahead if the Traditional Owners gave their consent.

Comments relating to Terms of Reference (c): Potential implications for global greenhouse gas emission reductions from Australia's uranium

Winning public support for uranium mining is a difficult challenge in Australia, even as other countries see nuclear power as part of a solution to global warming.

In Australia, British and French nuclear testing at Maralinga and in the South Pacific, together with other public debates on environmental and safety issues, have tended to reinforce negative attitudes to uranium mining and the nuclear fuel cycle. Negative public perceptions have led some State Governments to oppose mines, particularly in Western Australia and Queensland.

There is potential for the public debate to be better informed. There has been a greater openness to uranium mining among Australian opinion-leaders in recent years. This has been helped by objective data and commentary from the Melbourne-based Uranium Information Centre, of which ERA is a member and current Chair.

Nevertheless, it is clear the public debate is still to be won in Australia on this issue, with environmental groups still vigorously campaigning against uranium mining and increased use of nuclear energy overseas.

The attitude of the Australian environmental movement has not yet followed the lead of some prominent overseas environmentalists who believe nuclear energy has a part to play in the global response to increasing greenhouse gas emissions.

It is argued that nuclear power is an essential component of any mix of low-emission power generation technologies required to reduce greenhouse gas production. The push for reductions in greenhouse gas emissions is likely to increase the demand for uranium in coming years. If this occurs, there will be sustained upwards pressure on uranium prices, making the exploitation of Australian uranium deposits even more attractive.

The dramatic rise in the market price of uranium oxide for the second successive year is causing an increased interest in new investment in exploration and mine development. However, this price will need to be sustained to encourage the required new investment.

Nuclear power is already a critical component of large-scale energy production around the world. For a full discussion of the data on the current industry please see the Uranium Information Centre's submission to this inquiry, which ERA has reviewed. ERA has also reviewed and assisted the Mineral Council of Australia's submission to this inquiry.

Comments relating to Terms of Reference (d): Current Structure and Regulatory Environment of Uranium Mining Sector

There have been three Senate inquiries into uranium in the past decade, as well as a South Australian Government inquiry and a Northern Territory Government inquiry related to regional uranium mining issues. As the longest-operating uranium producer in Australia today (there are only three producing uranium mines currently in Australia) ERA believes it can contribute to the inquiry by outlining the regulatory regime in some detail [*see Appendix A*].

ERA's Ranger mine and Jabiluka site continue to meet some of the most rigorous reporting regimes in Australia. A Commonwealth Government agency, the Office of

the Supervising Scientist currently with 44 staff, reports on ERA's activities regularly to the Federal Parliament and to Government ministers as the major part of its work.

ERA believes the regulations that govern its operations are comprehensive and thorough. They are derived from Commonwealth legislation, Northern Territory legislation, and formal agreements between the Commonwealth and the representatives of Traditional Owners, the Northern Land Council.

ERA supports the principle that mining should always be carried out with minimum impact on the environment, in the interests of sustainable development, and it supports the strong regulatory framework that covers its operation.

There is an extensive level of formal oversight of ERA's operations from a wide variety of bodies including the Supervising Scientist, the Commonwealth Department of Industry, Tourism and Resources, the Australian Safeguards and Non-Proliferation Office, the Northern Territory Department of Business, Industry and Resource Development, the Northern Land Council, the Minesite Technical Committees (MTCs), the Alligator Rivers Region Technical Committee (ARRTC) and the Alligator Rivers Region Advisory Committee (ARRAC). ERA also provides information and advice on its activities to the Mirarr Traditional Owners through the Gundjeihmi Aboriginal Corporation and to other Jabiru-based groups.

Since construction of Ranger began in 1979, the Supervising Scientist's annual reports have found no adverse environmental impact on the surrounding World Heritage area resulting from ERA's operations. As has been extensively documented and reported, there have been some environmental, health and safety incidents at the mine site over the 25 years of ERA's operations. These have been disclosed to the regulatory authorities and extensively investigated and reported.

ERA's first prosecution in 25 years of operation occurred in 2005. The company pleaded guilty to several charges under the Mining Management Act, relating to health and safety issues, and received a fine of \$150,000. [See the company's website www.energyres.com.au for public announcements on these matters.]

Planning for the rehabilitation of ERA's mine sites is an important part of its annual planning process, with annual reports to Government on closure and rehabilitation plans, including a rehabilitation fund, currently totalling more than \$60 million in the event that the company closes. Under ERA's authorisation, when operations cease, the mine site will be rehabilitated to the extent that it could be incorporated into the surrounding World Heritage-listed Kakadu National Park.

Given the company's current view that mining operations will continue until 2008, and milling operations until 2011, ERA is compiling a more extensive closure plan that will further improve the planning and execution of its rehabilitation work.

ERA has a policy to maintain transparency of its operations, particularly from an environmental point of view. ERA provides all information that the regulators require, and is subject to regular site inspections by the regulators and the Northern Land Council.

Appendix A

A Comprehensive Legislative Framework

A comprehensive and complex suite of environmental regulations has been established for the Ranger mine and Jabiluka lease area at the Commonwealth and Northern Territory levels. These regulations have evolved over time, and are now arguably the most stringent and independently monitored environmental regulations in Australia.

The framework includes:

Atomic Energy Act

The Commonwealth Government's decision to allow the mining and milling of uranium to proceed was made in August 1977 following the recommendations of the First and Second Reports of the Ranger Uranium Environmental Inquiry (the Fox Inquiry) which was established under the provisions of the Commonwealth's *Environmental Protection (Impact of Proposal) Act 1974*.

Under section 41 of the *Atomic Energy Act 1953* (Cth), the Commonwealth Minister for Industry, Tourism and Resources has granted an Authority to mine and process uranium ore at Ranger. The Ranger Environmental Requirements (ERs) are attached to this Authority. In January 2000, a new Section 41 Authority was issued which incorporates revised Environmental Requirements for Ranger. The new Ranger Environmental Requirements set out *Primary* and *Secondary Environmental Objectives* which establish the principles by which the Ranger operation is to be conducted and the standards which are to be achieved.

The Primary Environmental Objectives relate to environmental protection and rehabilitation. They dictate that present and future activities at Ranger must not impact upon the values, attributes and ecosystem health of Kakadu National Park nor the health of the regional community, and require that the site be rehabilitated to establish an environment such that it could be incorporated into Kakadu National Park.

The Secondary Environmental Objectives deal with a number of particular aspects of environmental management that are to be specifically addressed and reported on, including water quality, air quality and hazardous substances, to ensure that the Primary Environmental Objectives are not compromised. The Environmental Requirements include monitoring and reporting obligations, both on a periodic basis and in response to "incidents", including any mine-related event "which is of or could cause concern to Aboriginals or the broader public."

Aboriginal Land Rights Act

The Northern Land Council (NLC), representing the traditional Aboriginal owners of the land, is given specific roles under the Environmental Requirements, and in the Agreement between the Commonwealth and the NLC pursuant to section 44 of the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth), the Commonwealth

has committed to ensuring that ERA complies with the Environmental Requirements. There is also an agreement over the Jabiluka lease under Section 43 of the Act, and this remains, even with the new 2005 Jabiluka Long Term Care and Maintenance Agreement.

Mining Act (NT)

The Atomic Energy Act does not apply to the Jabiluka lease. Jabiluka is a Mineral Lease granted by the Northern Territory government under the Mining Act 1980 (NT). A separate set of Environmental Requirements exists for Jabiluka and are attached to that Mineral Lease.

Mining Management Act (NT)

The operational approvals for Ranger and Jabiluka are contained in Authorizations 0108-01 and 0140-pursuant to the *Mining Management Act*. The Authorisations reflect the Environmental Requirements and contain additional prescriptive requirements aimed at protecting the environment and achieving the Primary Environmental Objectives, and also containing more detailed provisions relating to monitoring and reporting. The Authorizations have evolved over time as a result of extensive dialogue with key stakeholders to meet changing expectations, with changes ultimately being approved by the Northern Territory Minister for Business, Industry and Resource Development, who is the “Supervising Authority” for the purposes of the Environmental Requirements.

Regulating and Overseeing Bodies

In parallel with the comprehensive environmental regulations, there have been a number of statutory bodies established to enforce the regulations and ensure independent and rigorous overview of the measures used to protect the environment.

These statutory bodies are:

Supervising Scientist

The Office of the Supervising Scientist (OSS) and the Environmental Research Institute of the Supervising Scientist (eriss) are established by the *Environmental Protection (Alligator Rivers Region) Act 1978*.

The Supervising Scientist's functions include providing advice to the Commonwealth Minister for the Environment and Heritage on environmental matters associated with uranium mining in the Alligator Rivers Region, as well as developing and co-ordinating research and monitoring programs and devising and developing standards practices and procedures in relation to uranium mining aimed at protecting the environment. In addition, the Environmental Research Institute of the Supervising Scientist, carries out independent research and monitoring into the effects of uranium mining on the environment in the Alligator Rivers Region. ERA believes that the Office of the Supervising Scientist has the scientific expertise to be able to advise the Minister for Environment and Heritage of the potential impacts of uranium mining on the environment and carries out its duties with professionalism and integrity.

Northern Territory Department of Business, Industry and Resource Development (NT DBIRD):

For the purposes of the Environmental Requirements, the Minister of Business, Industry and Resource Development is the designated Supervising Authority and is responsible for ensuring the environmental regulations at Ranger and Jabiluka are complied with.

Minesite Technical Committees

The Ranger Minesite Technical Committee (MTC) and the Jabiluka Minesite Technical Committee are the key forums for discussion on environmental matters relating to Ranger and Jabiluka. The MTCs were established under a set of working arrangements agreed between the Commonwealth Government and the Northern Territory Government. Both committees are chaired by the NT Government (DBIRD) and includes representatives from ERA, the NLC, and the Commonwealth Government (OSS). The role of the MTCs is to provide advice to the NT DBIRD in defining, establishing and maintaining best mining practice in relation to site-specific technological, scientific and environmental factors and constraints. Accordingly, the compliance monitoring and reporting system described by the Ranger and Jabiluka Authorizations have evolved to take account of stakeholders' concerns, views and information requirements, and to maintain transparency in reporting. While the Minesite Technical Committees have no executive or regulatory authority, ERA values the contribution made by MTC members in the provision of advice in assisting it to meet the expectations of its stakeholders.

ARRAC and ARRTC

Two bodies were established under the *Environmental Protection (Alligator Rivers Region) Act 1978 (Cth)*, - the Alligator Rivers Region Advisory Committee (ARRAC) and Alligator Rivers Region Technical Committee (ARRTC). ARRAC was established to provide a formal forum for consultation on matters relating to the effects on the environment in the region of uranium mining and other environmental research matters. Its members include representatives of the Northern Territory Government (DBIRD, Department of Lands, Planning and the Environment, Territory Health Services, Parks and Wildlife Commission of the Northern Territory) the Commonwealth Government (OSS, the Director of National Parks, Department of Industry, Tourism and Resources, ARPANSA), the Northern Land Council, Aboriginal associations (Gundjeihmi Aboriginal Corporation, Gagudju Association, Djabulukgu Association) companies (ERA, Cameco Australia Pty Ltd, Queensland Mines Pty. Ltd.), the Jabiru Town Council and the NT Environment Centre. It is chaired by Professor Charles Webb of Charles Darwin University.

ARRAC can provide a valuable forum for discussion and tabling of stakeholder concerns. The role of ARRTC is to consider research programs and programs for the collection and assessment of information relating to the effects on the environment in the region of uranium mining. ARRTC provides advice to the Commonwealth Minister for Environment and Heritage as to whether the quality of the science used is of an appropriately high standard.

Ministerial Decision-making Authority

Although the NT Minister is the Supervising Authority under the Ranger Environmental Requirements, the Commonwealth Minister for Industry, Tourism and Resources has the primary decision-making role. In the Agreement between the Commonwealth of Australia and the Northern Territory of Australia in relation to Principles to be Applied in the Regulation of Uranium Mining in the Northern Territory of Australia (dated 17 November 2000), the Commonwealth and the Territory agree at Clause 5 to:

“...recognise the basic principle that the Territory shall consult with the Commonwealth in respect of matters agreed in writing between them relating to the mining of prescribed substances in the Territory. The Territory Minister shall act in accordance with any advice on the matter which is provided by the Commonwealth Minister.”

Australian Safeguards and Non-Proliferation Office (ASNO)

Pursuant to the Nuclear Non-Proliferation (Safeguards) Act 1987 ERA has a permit to possess nuclear material which includes conditions relating to the means and route by which nuclear material is transported, the measures to ensure the physical security of the material, the records to be kept and the reports to be furnished in respect of the transport of the material or item. The Act provides authorized inspectors with wide powers to determine compliance and establishes the Australian Safeguards Office, which is one of the government agencies forming part of ASNO. ASNO reports to the Minister for Foreign Affairs.

External Reviews

Since construction commenced at Ranger in 1979, and at Jabiluka in 1998, the Ranger mine and Jabiluka site have been subjected to unprecedented levels of scrutiny by a wide variety of organisations under various governments.

These include:

- Monthly inspections and half-yearly and annual environmental audits by NT DBIRD.
- Annual reports by the OSS, independent of NT DBIRD;
- Specific reports by the OSS on particular events that have occurred from time to time;
- Reviews by ASNO of ERA's security and compliance with ERA's permit to possess nuclear material;
- Reviews by Australian Nuclear Science and Technology Organisation (ANSTO) and Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) on behalf of Commonwealth Minister for Industry, Tourism and Resources to provide assurance to the minister that ERA has met certain conditions imposed by the Minister in response to recommendations by the Supervising Scientist in 2004.
- Reviews of the Jabiluka site by the World Heritage Committee and the Independent Science Panel of the International Council of Science
- Three Senate Inquiries (1997, 1999, 2002)